

What is Claimed:

- 1 1. A method of interacting with a display, said method
2 comprising:
3 transmitting a light point towards said display; and
4 establishing a mode of operation of said light point based on timing
5 associated with illumination of said light point.
- 1 2. The method of claim 1 further comprising the steps of:
2 determining a position of said light point with respect to an image
3 on said display; and
4 updating said image based on at least one of said position and said
5 mode of operation.
- 1 3. The method of claim 1 wherein said mode of operation is
2 established based on said timing and a position of said light point.
- 1 4. The method of claim 1 wherein said timing corresponds to
2 an interval between successive illuminations of the light point.
- 1 5. The method of claim 1 wherein said timing corresponds to a
2 sequence of operations of the light point.
- 1 6. The method of claim 2 further comprising the step of:
2 establishing a color range corresponding to a scanned color of said
3 light point,
4 wherein said step of determining includes scanning said light point
5 and said image on said display, and

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6 said position of said light point corresponds to a scanned area
7 having a color within said color range.

1 7. The method of claim 2 wherein said image is updated based
2 on both said position and said mode of operation.

3 8. The method of claim 1 further comprising the steps of:
4 receiving a voice command; and
5 effecting operation of said light point based on said voice
6 command.

1 9. A method of interacting with a display, said method
2 comprising the steps of:

3 projecting a first image on said display;

4 transmitting a light point towards said display;

5 establishing a mode of operation of said light point based on timing
6 associated with illumination of said light point;

7 capturing a combined image of said first image together with said
8 light point;

9 processing said combined image to determine a position of said
10 light point; and

11 updating said first image based on at least one of said position and
12 said mode of operation.

1 10. The method of claim 9 wherein said mode of operation is
2 established based on said timing and said position.

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3 11. The method of claim 9 wherein said first image is updated
4 based on both said position and said mode of operation.

5 12. The method of claim 9 further comprising the steps of:

6 receiving a voice command; and

7 effecting operation of said light point based on said voice
8 command.

1 13. An apparatus for interacting with a display via a light point,
2 said apparatus comprising:

3 timing means for determining timing associated with illumination
4 of said light point; and

5 control means for controlling a mode of operation of said light
6 point based on said timing.

1 14. The apparatus of claim 13 additionally comprising:

2 scanning means for determining a position of said light point with
3 respect to an image on said display; and

4 update means for updating said image based on at least one of said
5 position and said mode of operation.

1 15. The apparatus of claim 13 wherein said mode of operation is
2 controlled based on said timing and a position of said light point.

3 16. The apparatus of claim 13 wherein said timing means
4 determines time intervals between successive illuminations of said light point.

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1 17. The apparatus of claim 13 wherein said timing corresponds
2 to a sequence of operations of said light point.

1 18. The apparatus of claim 14 wherein said scanning means
2 scans a combined image including said light point and said image on said display
3 and determines said position of said light point by determining an area of said
4 combined image that has a color corresponding to a color range of a scanned
5 light point.

1 19. The apparatus of claim 14 wherein said update means
2 updates said image based on both said position and said mode of operation.

3 20. The apparatus of claim 13 further comprising voice
4 recognition means for receiving a voice command and effecting operation of said
5 light point based on said voice command.

1 21. An apparatus for interacting with a display via a light point,
2 said apparatus comprising:

3 a projector for projecting a first image on said display;

4 a light point for transmission toward said display;

5 timing means for determining timing associated with illumination
6 of said light point;

7 control means for controlling a mode of operation of said light
8 point based on said timing;

9 a camera for capturing a combined image of said first image
10 together with said light point;

11 an image processor for processing said combined image to
12 determine a position of said light point; and

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13 update means for updating said first image based on at least one of
14 said position and said mode of operation.

1 22. The apparatus of claim 21 wherein said mode of operation is
2 controlled based on said timing and said position.

3 23. The apparatus of claim 21 wherein said update means
4 updates said first image based on both said position and said mode of operation.

1 24. The apparatus of claim 21 further comprising voice
2 recognition means for receiving a voice command and effecting operation of said
3 light point based on said voice command.

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